

HiFLUX

High Pressure Valves & Fittings



HIGH SERVICE
HIGH QUALITY
HIGH PERFORMANCE
High Pressure equipment

HIFLUX

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HIFLUX



Passion for a high-pressure future, constant challenge and innovation

HIFLUX Co., Ltd. has been recognized for its technological prowess by successfully producing various of high-pressure piping materials that are difficult to manufacture domestically through continuous R&D and facility investment to open up new markets in the ultra-high pressure piping materials sector.

Based on differentiated technological prowess and price competitiveness compared to overseas manufacturers in Europe and the United States, it is growing into a global brand by concluding OEM supply contracts with domestic OEM suppliers and overseas global waterjet manufacturers.

In addition, in order to open up new markets, we have developed air-operated valves, high-pressured pressure regulators, back pressure regulators, and other fittings for various purposes and pressure-specific accessories, and now our products are being applied to mass production facilities in various industries.

Expanding R&D investment to achieve carbon neutrality

In order to contribute to carbon neutrality, HIFLUX has researched and developed manual valves for hydrogen refueling stations with pure domestic capital and technology, obtained KS certification, and is currently being supplied to hydrogen refueling station plant sites. It is also developing check valves and pneumatic valves (AOV) KS propulsion and valves for liquefied hydrogen.

In addition, based on its technology related to high-pressure piping for hydrogen refueling stations, it was selected as a hydrogen specialized company by the Ministry of Trade, Industry and Energy in 2024. We will continue to do our best to contribute to the development of the hydrogen industry through steady investment and marketing.

We will always listen to our customers' voices and contribute to productivity and quality improvement through continuous product improvement and service provision, and strive to become HIFLUX that can grow and develop together with our customers.

Thank you.

HIFLUX Co., Ltd. | CEO *Kim Hyeon Hyo*

Overview

Company name	HIFLUX Co., Ltd.	CEO	Kim Hyeon Hyo
Date of Establishment	May 26, 2010	Business Area	Various valves, hydraulic equipment, pumps, etc
Address	(34037) Da Dong, 361-33, Gapcheon-ro, Yuseong-gu, Daejeon, Republic of Korea	Telephone	+82 042-933-5670 (Extension number 1.Technical Sales Department 2.Design Department 3.Public Relations Department 4.Purchasing Department 5.Production Department)
E-mail	Technical Sales Dept : sales@hiflux.com Promotion Dept : min@hiflux.com	Main Product	Needle Valve, Check Valve, Ball Valve, Relief Valve, Air Operated Valve, High-Temp Valve, Control Valve, Fitting, Fitting Accessory, Tube, Nipple, Regulator, Union, Adapter, Tube Support, Radiating Pipe, Pressure Gauge, Tooling Set, Lok Type Products

HIFLUX HISTORY

- 2024.05. Selected as a 'Hydrogen Specialist Company' by Government
- 2023.10. Acquired 'KS certification for manual valve for hydrogen refueling station' by KGS
- 2023.05. KS Q ISO 45001 certification
- 2023.05. Selected as a 2023 HIFLUX Small Giant Company
- 2021.08. Patent (Double-sealed check valve) acquired
- 2021.07. Received a commendation from KGS
- 2021.03. Patent (High-pressure valve) acquired
- 2020.07. 'Material/Component/Equipment Specialist Company Confirmation' acquired
- 2020.07. Patent (High-temperature/high-pressure valve) acquired
- 2020.06. R&D (Valve and fittings for H70 hydrogen refueling stations)
- 2020.04. Patent (Valves including stem carriers) acquired
- 2020.02. 2 types of valve patents acquired
- 2019.01. Joined the Korea Hydrogen Industry Association
- 2018.09. Moved to new headquarters and factory in Daedeok Techno Valley
- 2018.08. Acquired 'Venture Business Certification' from the Technology Guarantee Fund
- 2018.02. HIFLUX acquired European Standard Certification (CE)
- 2016.09. Self-developed 3 types of high-pressure valves
- 2016.04. Self-developed high-pressure Trunnion Ball Valve
- 2015.11. Self-developed high-pressure relief valve
- 2015.11. Factory expansion
- 2015.10. High pressure manifold block, high pressure ball valve self-development
- 2015.08. High pressure relief valve, high pressure needle valve self-development
- 2014.07. Corporate research institute certification
- 2013.10. KS Q ISO 9001 certification, KS I ISO 14001 certification
- 2010.05. Establishment of HIFLUX

Certification Patents



Certificate of Hydrogen Specialist Company



KS Certificate of Needle valve for Hydrogen Station



ISO 9001, 14001, 45001 (Quality, Environment, Health)



CE Certifications



Certificate of Corporate Research Institute



Certificate of Small and Medium Enterprise



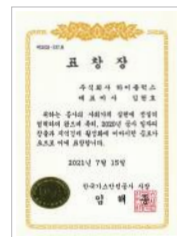
Certificate of Materials/Parts/Equipment Specialist Enterprise



Certificate of Venture Enterprise



Hydrogen Association Membership Card



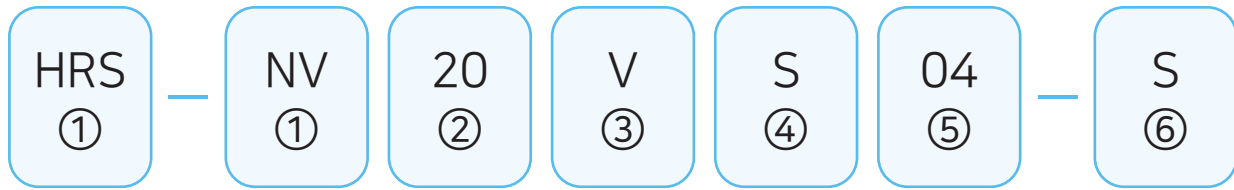
Gas Safety Corporation Award



Patent Certificate / Trademark Registration Certificate

Catalog Numbering System

simply indicate catalog number and specify option or special requirement



① Products	② Pressure	③ Type of Components	④ Material	⑤ Tube Size	⑥ Options
HRS-NV : Hydrogen Refueling System Needle Valve	03 : 3,000 psi	Needle Valve - V : Vee Stem - R : Regulating Stem	S : Stainless Steel 316	02 : 1/8 inch 04 : 1/4 inch	Needle Valve Control Valve Air Operated Valve High Temperature Valve
NV : Needle Valve	07 : 7,500 psi	Check Valve - O : O-Ring Type - B : Ball Type	H : Hastelloy	06 : 3/8 inch	- S : Straight Type - A : Angle Type
CV : Check Valve	15 : 15,000 psi	Ball Valve	HC : Hastelloy C276 Wetted Part	08 : 1/2 inch	- O : 3way/1on Type - T : 3way/2on Type
BV : Ball Valve	20 : 20,000 psi	- 03 : Orifice 4.8mm - 05 : Orifice 8mm	IN : Inconel 600	09 : 9/16 inch 12 : 3/4 inch	- D : 3way 2stem Type Ball Valve - 20-90 : 2way
ABV : Actuator Ball Valve	30 : 30,000 psi	Control Valve Air Operated Valve - O : Normal-Open Type - C : Normal-Closed Type	IN625 : Inconel 625	16 : 1 inch	- 3-180 : 3way Switching - 3-90 : 3way Diverting
AOV : Air Operated Valve	60 : 60,000 psi	Relief Valve - FS : Factory Set - FA : Field Adjustable - PP : Proportional Type	IN825 : Inconel 825	15 : 15A 25 : 25A	Relief Valve Field Adjustable - 1 : 1 Inlet - 2 : 2 Inlet
RV : Relief Valve	100 : 100,000 psi	Fitting - E : Elbow Type - T : Tee Type - C : Cross Type	NI : Nickel 200		Proportional Type - N : NPT Inlet port
KGC-RV : Gsa Relief Valve	150 : 150,000 psi	Fitting Accessory - A : Adapter - S : Sleeve - G : Gland - R : Collar - T : Collet	TI : Titanium		Fitting Accessory - AV : Anti-Vibration Type
SH : Safety Head	N : NPT P : PT				GPR - N : Normal Type - P : Panel Type
CON : Control Valve					
HV : High Temperature Valve					
GV : Wellhead Gauge Valve					
BLV : Bleed Valve					
DBBV : Double Block and Bleed Valve					
FT : Fitting					
FA : Fitting Accessory					
MF : Manifold Block					
FATC : Tube Cap					
T : Tube					
N : Nipple					
A : Adapter					
BPR : Back Pressure Regulator					
HPR : High Pressure Regulator					
GPR : General Pressure Regulator					
ABPR : Air Operating Back Pressure Regulator					

➤ Example

- NV60VS06-A : Needle Valve, 60,000 psi, Vee Stem, 3/8", Angle Type.
- NV15VS04-O : Needle Valve, 15,000 psi, Vee Stem, 1/4", 3Way/1on Pressure Type.
- AOV60CS04-A : Air Operated Valve, 60,000 psi, Normal-Closed, 1/4", Angle Type.
- FT60ES06 : Fitting, 60,000 psi, Elbow Type, 3/8".
- FA60GS04-AV : Fitting Accessory, 60,000 psi, Gland, 1/4", Anti-Vibration Type.

Air Operated Valve

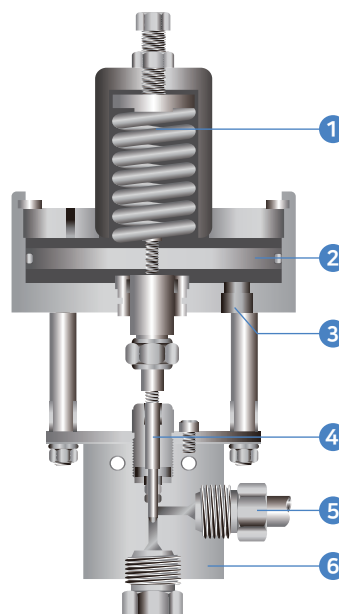
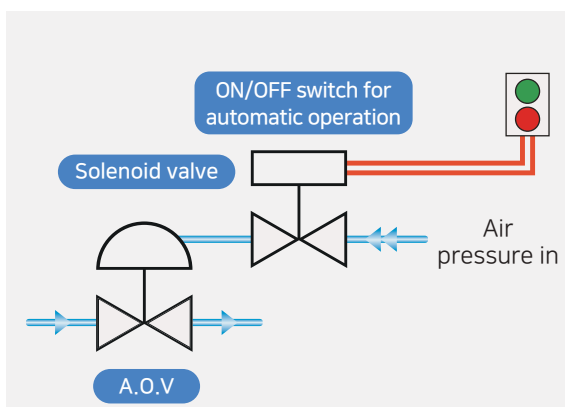
Valve that automatically opens and closes the valve using air pressure



Features

- 2 types of upper body (Normal Open, Normal Closed Type)
- Normal Open Type: The valve closes when air is supplied while the valve is normally open
- Normal Closed Type: The valve opens when air is supplied while the valve is normally closed
- Minimum air pressure for operation: 5 kgf/cm²
- The lower part through which the fluid or gas flows has the same 4 types of shapes as the needle valve
- The tension of the spring can be adjusted by adjusting the bolt on the upper part
- When system control is required, AOV can be operated by controlling air pressure without moving from a distance
- An explosion-proof valve that is safer than an electric valve that is operated by air pressure and has the risk of explosion

Exploded View & Dimensions



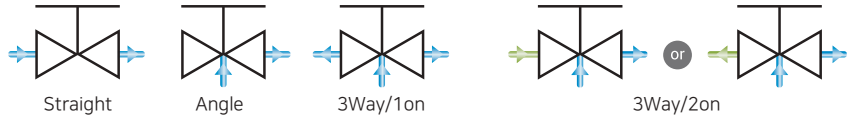
No	DESCRIPTION
1	Spring
2	Round plate
3	Lower air pressurized part
4	Stem connected to round plate
5	Connections
6	Valve Body

➤ Normal Open Type



1. Normally, the stem connected to the round plate is raised, so the valve is open.
2. The air pressure from the top is supplied, so the round plate moves down due to the air pressure,
3. The stem connected to the round plate also moves down, blocking the open orifice, so the flow of fluid or gas is blocked.
4. To open the valve again, block the incoming air pressure and vent the air already in the product, and the round plate and stem are raised again by the restoring force of the spring located at the bottom, so that the valve opens and the fluid flows again.

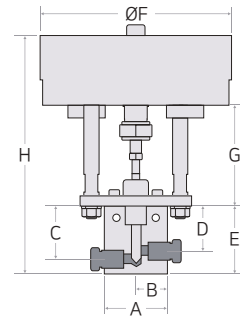
The lower body of A.O.V. has four types identical to needle valves depending on the direction in which the fluid flows



Straight

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV150S02-S	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	151	79.5	179.5	20
AOV150S04-S		H1504	1/4"	0.2	3.2	50	25	40	30	62	151	79.5	184.5	20
AOV150S06-S		H1506	3/8"	0.2	3.2	50	25	40.3	29.5	50	151	79.5	184.5	20
AOV100S08-S	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	75	159	81.5	247.1	25
AOV200S04-S	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	50	151	79.5	184.5	20
AOV200S06-S		H2006	3/8"	0.75	5.5	50	25	40	30	50	151	79.5	184.5	20
AOV200S09-S	60,000 psi	H2009	9/16"	1.3	7.9	63	31.5	60	44	73	159	81.5	245.1	25
AOV600S04-S		H6004	1/4"	0.08	2	50	25	43	33	54	151	79.5	188.5	25
AOV600S06-S		H6006	3/8"	0.09	2	50	25	43	33	57	151	79.5	191.5	25
AOV600S09-S		H6009	9/16"	0.14	2	67	33.5	43	33	62	151	79.5	196.5	38

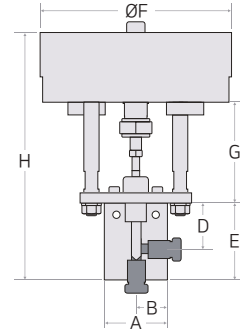
All dimensions are for reference only and may differ from actual size.



Angle

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	D	E	F	G	H		
AOV150S02-A	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	151	79.5	179.5	20	
AOV150S04-A		H1504	1/4"	0.2	3.2	50	25	30	62	151	79.5	196.5	20	
AOV150S06-A		H1506	3/8"	0.2	3.2	50	25	30	62	151	79.5	196.5	20	
AOV100S08-A	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	159	81.5	258.1	25	
AOV200S04-A	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	151	79.5	196.5	20	
AOV200S06-A		H2006	3/8"	0.75	5.5	50	25	30	62	151	79.5	196.5	20	
AOV200S09-A	60,000 psi	H2009	9/16"	1.3	7.9	63	31.5	44	85.5	159	81.5	275.6	25	
AOV600S04-A		H6004	0.08	2	50	25	25	33	60.5	151	79.5	195	25	
AOV600S06-A		H6006	0.09	2	50	25	25	33	66.5	151	79.5	201	25	
AOV600S09-A		H6009	0.14	2	67	31.5	33.5	33	67	151	79.5	201.5	38	

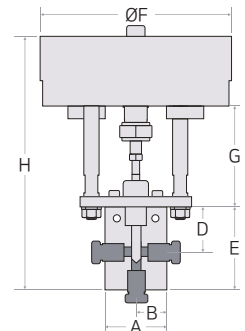
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3Way/1on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	D	E	F	G	H		
AOV150S02-O	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	151	79.5	179.5	20	
AOV150S04-O		H1504	1/4"	0.2	3.2	50	25	30	62	151	79.5	196.5	20	
AOV150S06-O		H1506	3/8"	0.2	3.2	50	25	30	62	151	79.5	196.5	20	
AOV100S08-O	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	159	81.5	258.1	25	
AOV200S04-O	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	151	79.5	196.5	20	
AOV200S06-O		H2006	3/8"	0.75	5.5	50	25	30	62	151	79.5	196.5	20	
AOV200S09-O	60,000 psi	H2009	9/16"	1.3	7.9	63	31.5	44	86	159	81.5	258.1	25	
AOV600S04-O		H6004	1/4"	0.08	2	50	25	33	60.5	151	79.5	195	25	
AOV600S06-O		H6006	3/8"	0.09	2	50	25	33	67	151	79.5	201.5	25	
AOV600S09-O		H6009	9/16"	0.14	2	67	33.5	33	71.5	151	79.5	206	38	

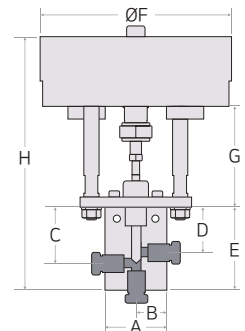
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3Way/2on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV150S02-T	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	151	79.5	179.5	20
AOV150S04-T		H1504	1/4"	0.2	3.2	50	25	40	30	66.5	151	79.5	201	20
AOV150S06-T		H1506	3/8"	0.2	3.2	50	25	41	30	66.5	151	79.5	201	20
AOV100S08-T	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	92	159	81.5	264.1	25
AOV200S04-T	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	66.5	151	79.5	201	20
AOV200S06-T		H2006	3/8"	0.75	5.5	50	25	40	30	66.5	151	79.5	201	20
AOV200S09-T	60,000 psi	H2009	9/16"	1.3	7.9	63	31.5	60	44	92	159	81.5	264.1	25
AOV600S04-T		H6004	1/4"	0.08	2	50	25	43	33	60.5	151	79.5	195	25
AOV600S06-T		H6006	3/8"	0.09	2	50	25	43	33	71.5	151	79.5	206	25
AOV600S09-T		H6009	9/16"	0.14	2	67	33.5	43	33	77	151	79.5	211.5	38

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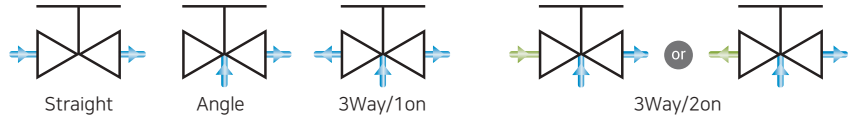


➤ Normal Close Type



1. Normally, the stem connected to the round plate is lowered, so the valve is closed.
2. The air pressure at the bottom is supplied from below, and the round plate moves upward due to the air pressure,
3. The closed orifice is opened, allowing fluid or gas to flow.
4. To close the valve again, block the incoming air pressure and vent the air already in the product, and the round plate and stem are lowered again by the restoring force of the spring located at the top, which closes the valve and blocks the flow of fluid.

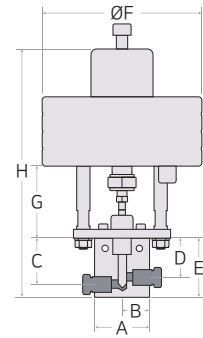
The lower body of A.O.V. has four types identical to needle valves depending on the direction in which the fluid flows.



Straight

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV15CS02-S	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	99	79.5	261.8	20
AOV15CS04-S		H1504	1/4"	0.2	3.2	50	25	40	30	50	141	66	239	20
AOV15CS06-S		H1506	3/8"	0.2	3.2	50	25	40.3	29.5	50	141	66	239	20
AOV10CS08-S	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	75	145	81.5	321.3	25
AOV20CS04-S	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	50	141	66	239	20
AOV20CS06-S		H2006	3/8"	0.75	5.5	50	25	40	30	50	141	66	239	20
AOV20CS09-S		H2009	9/16"	1.3	7.9	63	31.5	60	44	73	145	81.5	319.3	25
AOV60CS04-S	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	54	141	66	243	25
AOV60CS06-S		H6006	3/8"	0.09	2	50	25	43	33	57	141	66	246	25
AOV60CS09-S		H6009	9/16"	0.14	2	67	33.5	43	33	62	141	66	251	38

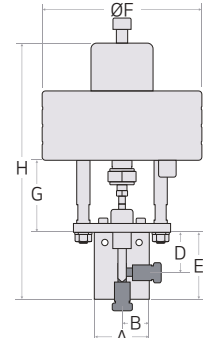
All dimensions are for reference only and may differ from actual size.



Angle

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness
						A	B	D	E	F	G	H	
AOV15CS02-A	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	99	79.5	261.8	20
AOV15CS04-A		H1504	1/4"	0.2	3.2	50	25	30	62	141	66	251	20
AOV15CS06-A		H1506	3/8"	0.2	3.2	50	25	30	62	141	66	251	20
AOV10CS08-A	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	145	81.5	332.3	25
AOV20CS04-A	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	141	66	251	20
AOV20CS06-A		H2006	3/8"	0.75	5.5	50	25	30	62	141	66	251	20
AOV20CS09-A		H2009	9/16"	1.3	7.9	63	31.5	44	85.5	145	81.5	331.8	25
AOV60CS04-A	60,000 psi	H6004	1/4"	0.08	2	50	25	33	60.5	141	66	249.5	25
AOV60CS06-A		H6006	3/8"	0.09	2	50	25	33	66.5	141	66	255.5	25
AOV60CS09-A		H6009	9/16"	0.14	2	67	31.5	33	67	141	66	256	38

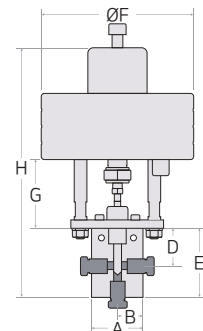
All dimensions are for reference only and may differ from actual size.



3Way/1on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness
						A	B	D	E	F	G	H	
AOV15CS02-O	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	99	79.5	261.8	20
AOV15CS04-O		H1504	1/4"	0.2	3.2	50	25	30	62	141	66	251	20
AOV15CS06-O		H1506	3/8"	0.2	3.2	50	25	30	62	141	66	251	20
AOV10CS08-O	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	145	81.5	332.3	25
AOV20CS04-O	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	141	66	251	20
AOV20CS06-O		H2006	3/8"	0.75	5.5	50	25	30	62	141	66	251	20
AOV20CS09-O		H2009	9/16"	1.3	7.9	63	31.5	44	86	145	81.5	332.3	25
AOV60CS04-O	60,000 psi	H6004	1/4"	0.08	2	50	25	33	60.5	141	66	249.5	25
AOV60CS06-O		H6006	3/8"	0.09	2	50	25	33	67	141	66	256	25
AOV60CS09-O		H6009	9/16"	0.14	2	67	33.5	33	71.5	141	66	260.5	38

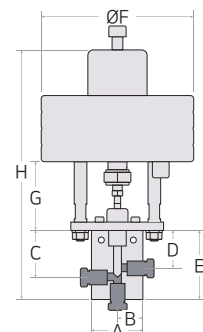
All dimensions are for reference only and may differ from actual size.



3Way/2on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness	
						A	B	C	D	E	F	G		H
AOV15CS02-T	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	99	79.5	261.8	20
AOV15CS04-T		H1504	1/4"	0.2	3.2	50	25	40	30	66.5	141	66	255.5	20
AOV15CS06-T		H1506	3/8"	0.2	3.2	50	25	41	30	66.5	141	66	255.5	20
AOV10CS08-T	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	92	145	81.5	338.3	25
AOV20CS04-T	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	66.5	141	66	255.5	20
AOV20CS06-T		H2006	3/8"	0.75	5.5	50	25	40	30	66.5	141	66	255.5	20
AOV20CS09-T		H2009	9/16"	1.3	7.9	63	31.5	60	44	92	145	81.5	338.3	25
AOV60CS04-T	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	60.5	141	66	249.5	25
AOV60CS06-T		H6006	3/8"	0.09	2	50	25	43	33	71.5	141	66	260.5	25
AOV60CS09-T		H6009	9/16"	0.14	2	67	33.5	43	33	77	141	66	266	38

All dimensions are for reference only and may differ from actual size.

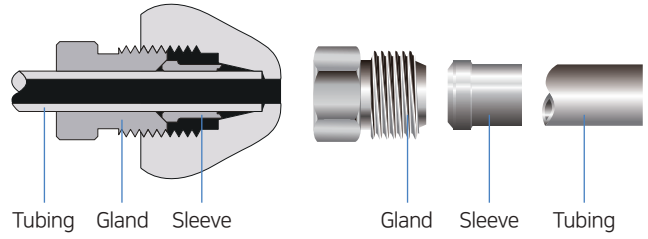


Port Type

Low Pressure Port Type

▶ Sleeve Type Connections - 10,000 psi / 15,000 psi

Sleeve Type is a method of attaching a sleeve inside a gland and can be used on 1/8", 1/4", 3/8", and 1/2" pipes. The tubes used for connecting products can be ordered from HIFLUX Mall and are made of stainless steel to ensure optimal performance in high-pressure environments.



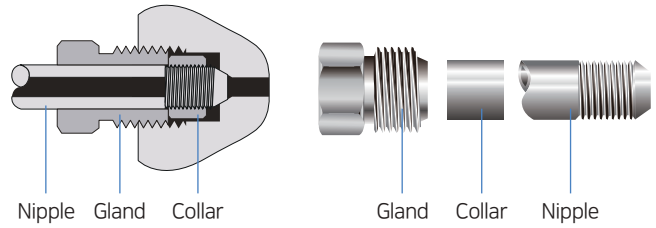
H1502 15,000psi - 1/8"	H1504 15,000psi - 1/4"	H1506 15,000psi - 3/8"	H1008 10,000psi - 1/2"

Port Type

Medium Pressure Port Type

Medium Pressure Connections - 20,000 psi

Products are connected using Collar and Nipple within the Gland, and the Nipple required for connecting products can be ordered in the desired length by the user, and can also be processed directly using our tooling set.



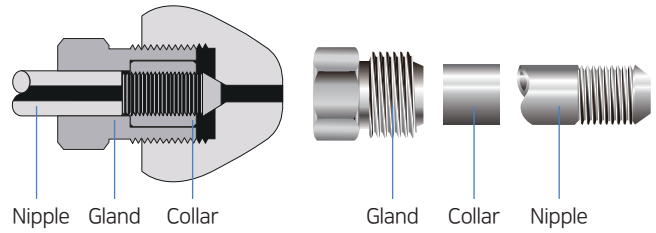
H2004 20,000psi - 1/4"	H2006 20,000psi - 3/8"	H2009 20,000psi - 9/16"	H2012 20,000psi - 3/4"	H2016 20,000psi - 1"

Port Type

High Pressure Port Type

High Pressure Connections - 30,000 psi / 60,000 psi

The Nipple required for connection between the products by using collar and Nipple in the Gland can be ordered by user's desired length. you can also process directly using our Tooling Set tool. this cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.



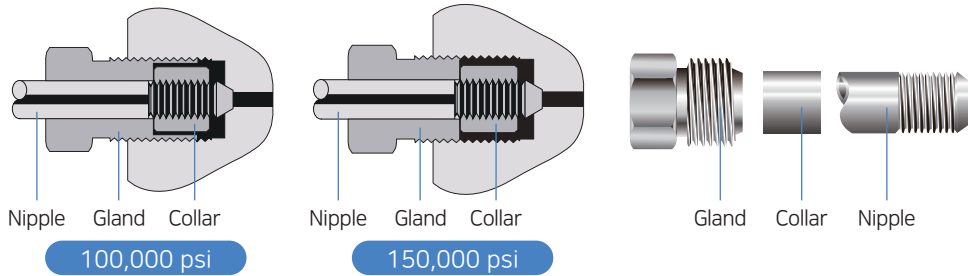
H3002 30,000psi - 1/8"	H3016 30,000psi - 1"	H6004 60,000psi - 1/4" (M : Metric)	H6006 60,000psi - 3/8" (M : Metric)	H6009 60,000psi - 9/16" (M : Metric)

Port Type

Ultra High Pressure Port Type

Ultra High Pressure Connections - 100,000 psi / 150,000 psi

The product is connected using a collar and nipple within the gland, and the corresponding pipe sizes are as follows. This Cone and Thread method connection is the optimal sealing method, and it provides reliable performance for both liquids and gases at high pressures and temperatures, and is the standard for easy and quick high-pressure equipment configuration.



H10004 100,000psi - 1/4"	H10006 100,000psi - 3/8"	H10009 100,000psi - 9/16"	H15006 150,000psi - 3/8"

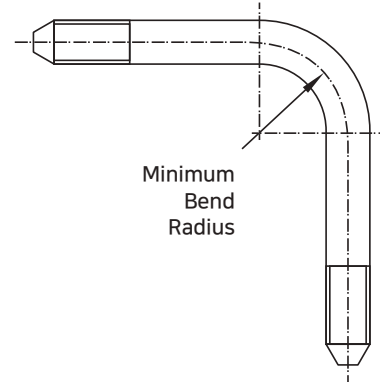
Technical Information

Recommended Torque

Recommended Minimum Bend Radius

Tubing Size O.D. x I.D. in. (mm)	Tubing Pressure psi (bar) @ R.T.	Recommended Minimum Bend Radius in. (mm)
1/4 inch (6.35 x 2.77)	20,000 (1,370)	1.25 (31.8)
3/8 inch (9.53 x 5.16)	20,000 (1,370)	1.75 (44.5)
9/16 inch (14.29 x 7.92)	20,000 (1,370)	2.63 (66.8)
3/4 inch (19.05 x 11.13)	20,000 (1,370)	3.50 (88.9)
1 inch (25.4 x 14.27)	20,000 (1,370)	4.63 (117.6)
1 inch (25.4 x 11.13)	30,000 (2,060)	4.63 (117.6)
1/4 inch (6.35 x 2.11)	60,000 (4,130)	1.25 (31.8)
3/8 inch (9.53 x 3.18)	60,000 (4,130)	1.75 (44.5)
9/16 inch (14.29 x 4.78)	60,000 (4,130)	2.63 (66.8)

All dimensions are for reference only and may differ from actual size.



HIFLUX Needle Valve Assembly Torque Chart

Valve Pressure Series	Port Type	Tube Size (PSI)	Stem Gland HEX (mm)	Minimum Torque (kg.f-cm)
10,000 PSI 15,000 PSI	H1502	1/8 Inch (15,000)	13	170
	H1504	1/4 Inch (15,000)	17	550
	H1506	3/8 Inch (15,000)	17	550
	H1008	1/2 Inch (15,000)	24	800
20,000 PSI	H2004	1/4 Inch (20,000)	17	550
	H2006	3/8 Inch (20,000)	17	550
	H2009	9/16 Inch (20,000)	22	1100
	H2010	3/4 Inch (20,000)	30	3,500
	H2012	1 Inch (20,000)	41	5,000
30,000 PSI	H3002	1/8 Inch (30,000)	13	500
	H6004	1/4 Inch (30,000)	20	550
	H6006	3/8 Inch (30,000)	20	550
	H6009	9/16 Inch (30,000)	20	550
60,000 PSI	H6004	1/4 Inch (60,000)	20	670
	H6006	3/8 Inch (60,000)	20	670
	H6009	9/16 Inch (60,000)	20	670
100,000 PSI	H10004	1/4 Inch (100,000)	24	1250
	H10006	3/8 Inch (100,000)	24	1250
	H10009	9/16 Inch (100,000)	24	1250
150,000 PSI	H15006	3/8 Inch (150,000)	24	1870
10,000 & 15,000 PSI NPT TYPE	HFN02	1/8 Inch (15,000)	13	500
	HFN04	1/4 Inch (15,000)	17	550
	HFN06	3/8 Inch (15,000)	17	550
	HFN08	1/2 Inch (15,000)	22	1100
	HFN10	3/4 Inch (10,000)	41	-
	HFN12	1 Inch (10,000)	41	-

Torque values apply to glass-impregnated Teflon packaging and may vary by ±10%



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